STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF DRINKING WATER
MARCH 5, 2019

ITEM 4

SUBJECT

CONSIDERATION OF A RESOLUTION ADOPTING THE PROPOSED PRIORITIZATION OF DRINKING WATER REGULATIONS FOR CALENDAR YEAR 2019

DISCUSSION

All public water systems, as defined in Health and Safety Code (HSC) section 116275, are subject to regulations adopted by the U.S. Environmental Protection Agency (U.S. EPA) under the Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300f *et seq*.), as well as by the State Water Resources Control Board (State Water Board) under the California Safe Drinking Water Act (HSC, div. 104, pt. 12, ch. 4, § 116270 *et seq*.).

California has been granted primary enforcement responsibility (primacy) by U.S. EPA for public water systems (PWS) in California. California has no authority to enforce federal regulations, and federal laws and regulations require that California, in order to receive and maintain primacy, promulgate regulations for California that are no less stringent than the federal regulations.

The State Water Board is tasked with adopting drinking water regulations and recycled water regulations associated with the protection of public health. These regulations include primary drinking water standards (*e.g*., maximum contaminant levels (MCLs) or treatment techniques), monitoring and reporting requirements, and any other standards related to providing safe drinking water (*e.g*., operator requirements, laboratory accreditation standards, design standards, secondary drinking water standards, pipe separation standards, *etc.*).

Establishing Priorities for Regulatory Development Work

The prioritization of the regulatory development work depends on several factors, including:

1. The relative public health benefit achieved by potential new or revised regulatory requirements or MCLs;
2. The establishment at the federal level of a new or revised drinking water regulation, MCL, or treatment technique addressing a specific contaminant or other requirement;
3. The existence of any statutory mandates to adopt a regulation within a specific timeframe; and
4. Other priorities and staffing resources available for the development and implementation of regulations.

Review of Existing MCLs

HSC section 116270 states California's legislative intent is to establish primary drinking water standards at least as stringent as those under the federal Safe Drinking Water Act and to establish a program that is more protective of public health than the minimum federal

requirements. HSC subsections 116365(a) and (b) require the State Water Board to adopt primary drinking water standards for contaminants. Each standard must be set at a level as close as feasible to the corresponding public health goal (PHG), placing primary emphasis on the protection of public health, and meeting, to the extent technologically and economically feasible, specified conditions. HSC 116365(g) requires review of each primary drinking water standard at least once every five years. If changes in technology or treatment techniques permit materially greater protection of public health or attainment of the PHG, then the State Water Board must amend the standard. HSC section 116365(h) states the following:

> "*Not later than March 1 of every year, the State Water Board shall provide public notice of each primary drinking water standard it proposes to review. Thereafter, the State Water Board shall solicit and consider public comment and hold one or more public hearings regarding its proposal to either amend or maintain an existing standard. With adequate public notice, the State Water Board may review additional contaminants not covered by the March 1 notice*."

Existing MCLs were last reviewed in 2018, and the results of that review are available here: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLReview.shtml

For 2018, staff conducted a preliminary review of existing MCLs and determined that none of the MCLs meet the criteria for revision based on protection of public health. This is based on a review of each MCL with respect to the following criteria:

- Changes in technology or treatment techniques that permit a materially greater protection of public health or attainment of the public health goal (PHG) and
- New scientific evidence that indicates that the substance may present a materially different risk to public health than was previously determined.

In conducting the 2018 review, staff found that detection limits for purposes of reporting (DLRs) currently set at concentrations greater than the corresponding PHGs effectively limit staff's ability to evaluate public exposure to contaminants at concentrations greater than the PHG, but less than the current DLR. While for many contaminants, analytical methods are available to report data at concentrations lower than current DLRs, many water systems and laboratories report concentrations only as low as the DLR. The lack of data on contaminant occurrence at concentrations below the DLR, but above the PHG, hinders staff's ability to evaluate whether technology or treatment techniques permit materially greater attainment of the PHG, the potentially affected population, and the economic and technological feasibility of lowering the MCL. 33 current MCLs have associated DLRs set at concentrations greater than the corresponding PHGs.

Staff recommends no further review of existing MCLs for calendar year 2019. Instead, staff recommends continuing to work with the Environmental Laboratory Technical Advisory Committee (ELTAC) to identify reporting limitations of analytical methods and evaluate laboratory capacity for reporting to lower concentrations. As lower reporting levels and adequate laboratory capacity are determined, staff proposes revising DLRs to allow collection of occurrence data to better inform the MCL review process. Staff will continue to evaluate occurrence data for MCLs with DLRs below the PHGs.

Evaluation of Current Priorities for Regulatory Development in 2019

1. Hexavalent Chromium

On May 31, 2017, the Superior Court of Sacramento County issued a judgment invalidating the hexavalent chromium maximum contaminant level (MCL) for drinking water. The MCL for hexavalent chromium was deleted from the California Code of Regulations September 11, 2017 and is no longer in effect. The court also ordered the State Water Board to develop a new MCL but did not mandate a deadline for its adoption.

a. Economic Feasibility Workshops

In establishing MCLs, Health and Safety Code section 116365 requires the State Water Board *"…to establish a contaminant's maximum contaminant level (MCL) at a level as close as is technically and economically feasible to its public health goal (PHG)."* The meaning of economic feasibility is foundational to developing future MCLs and staff is considering how to evaluate economic feasibility in future MCL proposals and regulations. A white paper evaluating economic feasibility is planned for public release prior to workshops scheduled for March and April of this year.

b. Maximum Contaminant Level

Following receipt of public input during the workshops, staff will proceed with development of a replacement MCL for hexavalent chromium.

2. Lead and Copper Rule

DDW recognizes the importance of effective regulation of lead exposure from drinking water. At the federal level, U.S. EPA has indicated that there will be a future revision of the federal LCR, although the date for any such changes is unknown. Therefore, staff proposes the following rulemaking work:

a. Short-Term Revisions

In December 2018, State Water Board and U.S. EPA Region 9 completed independent, parallel crosswalks (gap analyses) of the Lead and Copper Rule, including both the 2004 Minor Revisions and the 2007 Short-Term Revisions. Staff propose to modify Title 22 of the California Code of Regulations to incorporate the federal Short-Term Revisions in 2019. This would more quickly provide the public the benefit of the federal public education requirements and results of consumer tap lead samples.

b. Revised Lead Detection Limit for Purposes of Reporting (DLR)

Preliminary results from a survey of laboratories indicate that the DLR for lead may be lowered from 5 ppb (µg/l) to 1 ppb without sacrificing capacity. This review is still in progress, but staff anticipate proposing a revision for Board consideration in 2019.

c. Assistance to Department of Social Services for Daycare Regulations

AB 2370 (Chapter 676, Statutes of 2018) added section 1597.16 to the Health and Safety Code, requiring licensed child day care centers located in buildings constructed before 2010 to conduct initial sampling of drinking water for lead contamination between January 1, 2020 and January 1, 2023, and to repeat every five years from the date of the initial test. The analytical results of these tests must be submitted electronically to the State Water Board. If the results show elevated levels of lead, the State Water Board must report to the results to the Department of Social Services (DSS). In addition, the State Water Board is now required to:

i. Notify DSS if the Division of Drinking Water modifies the recommended action level for lead in drinking water;

ii. Post day care center test results to the internet; and

iii. Be consulted by DSS in the development of DSS regulations, to be adopted no later than January 1, 2021, implementing day care center lead sampling requirements.

DSS has been in discussions with DDW regarding the lead action level and lead detection limit for purposes of reporting (DLR). In February 2019, DDW recommended an action level for testing at child day care centers of 5 ppb and a DLR of 1 ppb.

d. Lead and Copper Rule Revision

DDW is working to identify and develop potential additional new regulatory requirements to increase public health protection. Potential new regulatory requirements would likely be based on the October 2016 U.S. EPA White Paper on LCR Revisions. The revisions could include elements such as proactive lead service line replacement programs, additional public education and outreach, and additional monitoring.

Non-Rulemaking Lead Activities

In addition to regulation development, DDW continues to be engaged with a number of non-regulatory efforts to evaluate and minimize lead exposure, including

- Continuing to implement a program for schools to test for lead in faucets and drinking fountains.
- Tracking compliance with California Assembly Bill 746 adopted in October 12, 2017, which requires that by July 1, 2019 all community water system to test lead levels in drinking water at all California public, K-12 school sites that were constructed before January 1, 2010.
- Tracking implementation of SB 1398, which requires public water systems to compile an inventory of known lead user service lines. This also requires that by July 1, 2020, a public water system with areas that may have lead user service lines do one of the following:
  - Determine the existence or absence of lead user service lines in use in its distribution system and provide that information to the State Water Board.
  - Provide a timeline to the State Water Board for replacement of user service lines whose content of lead cannot be determined.

3. Revised Total Coliform Rule (RTCR)

The most significant change in the revised regulations will be the elimination of the total coliform MCL and replacing it with a 'Find and Fix' approach, which involves conducting assessments and correcting deficiencies. The proposed state RTCR is more stringent than the federal RTCR in a few areas, for example: federal rule allows reduction of monitoring frequency for bacteriological monitoring from quarterly to annually for certain small water systems; California does not allow this reduction. DDW is currently implementing the federal RTCR, alongside the existing state TCR. DDW plans to notice the draft regulations for public comment in early summer 2019.

4. Direct Potable Re-use (DPR)

Under the provisions of Assembly Bill 574 (AB 574), the State Water Board is required to adopt uniform water recycling criteria for direct potable reuse through raw water augmentation by December 31, 2023. AB 574 also required the State Water Board to have established a framework for the regulation of potable reuse projects by June 2018.

a. Research and Framework

DDW continues foundational work for the development of regulations for DPR projects. This work is described in the State Water Board December 2016 report to the legislature "Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse". DDW held workshops on the proposed framework in northern and southern California in April 2018 and solicited written comments in April and May 2018. An informational item on the proposed framework was presented to the State Water Board on June 5, 2018. Research continues, and staff will be reporting to the Board on the status of this work in 2019.

b. Regulations

DDW continues work on an overall approach to regulating DPR projects, with a continued need for supporting research and establishment of an expert panel.

5. Cross-Connection and Backflow Protection Control Regulations

Assembly Bill 1671 added section 116407 to the Health and Safety Code and requires that on or before January 1, 2020, the State Water Board adopt standards for backflow protection and cross-connection control and authorizes the State Water Board to do so through the adoption of a policy handbook. This regulatory work consists of two primary components:

a. Update and replace existing outdated cross-connection control regulations; and

b. Develop cross-connection control specialist and tester certification criteria for certifying organizations wishing to be recognized by the State Water Board, for the purpose of certifying testers and specialists to be used by public water systems in accordance with the new cross-connection control requirements.

HSC 116407 requires two public hearings prior to Board adoption of the policy handbook. Draft standards are expected to be released for initial public review in late summer 2019.

6. Environmental Laboratory Accreditation Program (ELAP) Regulations

ELAP is responsible for the accreditation of laboratories conducting environmental testing for regulatory compliance in California. ELAP is developing regulations necessary to effectively regulate environmental testing laboratories. In 2017, ELAP developed preliminary draft regulations to implement HSC sections 100825 through 100920. The proposed regulations incorporate the 2016 TNI (The NELAC Institute) standard by reference, with minor modifications, and overhaul provisions pertaining to administration, laboratory personnel, on-site assessment, proficiency testing, quality assurance, enforcement, and fee schedules in Title 22, California Code of Regulations, Division 4, Chapter 19, Certification of Environmental Laboratories, Articles 1 to 14, sections 64801 to 64827.

7. In July and August 2018, ELAP conducted workshops throughout California following the release of the first preliminary draft regulations. Second and third preliminary draft regulations were released for public comment in June and December 2018, respectively, with additional workshops held in January 2019. These regulations are planned to be considered for adoption in fall 2019, with full compliance to be achieved approximately 3 years from the date of adoption.

8. **Primacy Package Applications**
   There is a backlog of approximately 18 primacy packages, some dating back to pre-1997. This is a high priority for U.S. EPA and DDW is coordinating with U.S. EPA to reduce the backlog. DDW completed two of the outstanding crosswalks in 2016 (LT1 and LT2). Adoption of California's Revised Total Coliform Rule and Lead and Copper Rule Short-Term Revisions is proposed for 2019, with primacy package applications to U.S. EPA to follow. In addition, U.S. EPA Region 9 is currently reviewing submitted primacy packages for its Consumer Confidence Report, Public Notification, Administrative Penalty Authority, and Public Water System definition rules.

   a. **Consumer Confidence Reports**
      Community water systems are required to provide annual Consumer Confidence Reports (CCRs) to consumers of tap water. CCRs include information on water quality provided by the water system, as well as information on health effects associated with specific contaminants. These reports allow the public to make informed personal health-based decisions regarding their use of tap water. California adopted its own rule to implement the federal regulations in 2001. U.S. EPA Region 9 has provided informal comments on California's CCR regulations indicating a need for revisions. Work on the crosswalk for this rule is underway, with proposed revisions planned for public notice and comment in late summer 2019.

   b. **Public Notification**
      The Public Notification Rule requires water systems to alert consumers if there is a risk to public health. Specifically, it requires customers to be notified if the water does not meet drinking water standards, if the water system fails to test its water as required, and if the water system has been granted a variance or exemption. California adopted its own rule to implement the federal regulations in 2006. U.S. EPA Region 9 recently provided informal comments on California's Public Notification regulations indicating a need for revisions. Work on the crosswalk for this rule is underway, with proposed revisions planned for public notice and comment in late summer 2019.

9. **Revised Perchlorate DLR**
   This work is being performed pursuant to direction from the State Water Board given at its July 5, 2017 meeting. At that time, the State Water Board approved DDW's recommendation to consider the revision of the DLR for perchlorate. DDW partnered with an ELTAC subcommittee to query laboratories about their perchlorate analysis capabilities and their sample capacity. The summary of the survey responses demonstrated an ability to lower the DLR without sacrificing capacity, but not to a level equal to or less than the PHG. This review has been completed and the proposed revision to the DLR is planned for Board consideration in 2019.

10. Microplastics

Microplastics is a new and emerging contaminant of concern not regulated in drinking water at the federal level. There is very limited research on both the occurrence of microplastics in drinking water supplies and any potential health effects. In 2018, the Senate and Assembly approved SB 1422, adding section 116376 to the Health and Safety Code and requiring the State Water Board to take the following actions:

a. Definition

By July 1, 2020, adopt a definition of microplastics in drinking water.

b. Testing and Reporting Regulations

By July 1, 2021,

i. Adopt standard analytical method(s) for the determination of microplastics in drinking water;

ii. Adopt requirements for four years of testing and reporting of levels of microplastics in drinking water, including public disclosure of results;

iii. Consider issuing a notification level or other consumer guidance; and

iv. Accredit qualified laboratories for the analysis of microplastics.

11. Water Quality Standards for On-site Treatment and Reuse

Effective January 1, 2019, Article 8 was added to the Water Code, requiring the State Water Board, on or before December 1, 2022, to adopt regulations for risk-based water quality standards for the on-site treatment and reuse of non-potable water for non-potable end uses in multi-family residential, commercial, and mixed-use buildings. The regulations would not address untreated graywater systems used exclusively for subsurface irrigation, or untreated rainwater systems, but must, at a minimum, include the following:

- Risk-based log reduction targets for the removal of pathogens
- Water quality monitoring and reporting requirements
- Notification and public information requirements
- Cross-connection controls

In addition to developing regulations of its own, the State Water Board is to be consulted by the Department of Housing and Community Development in developing, by December 1, 2023, any necessary corresponding building standards to support the State Water Board's risk-based water quality standards.

12. Electronic Reporting of Drinking Water Quality Data

DDW is developing revised regulations requiring electronically submitted drinking water analytical results to be reported in a format compliant with U.S. EPA's Cross Media Electronic Reporting Regulation (CROMERR). The proposed regulations would be contained in California Code of Regulations, Title 22, division 4, Chapter 15, Article 19, and would revise the format and form for reporting electronically delivered water quality data. Specifically, the regulation would require use of U.S. EPA's Compliance Monitoring Data Portal (CMDP) to intake electronic data. Proposed revisions to the existing regulation are planned for public notice and comment in mid-2019.

13. Investigation of Per- and Polyflouroalkyl Substances (PFAS)

DDW issued Notification Levels for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) in July 2018,and continues to investigate the extent of contamination of these and other PFAS materials in drinking water sources throughout the state. This information will be used to determine whether DDW should request the Office of Environmental Health Hazzard Assessment develop a PHG for one or more PFAS.

POLICY ISSUE

Should the State Water Board: adopt the proposed resolution and develop regulations?

FISCAL IMPACT

There is no fiscal impact and no funds are being requested.

REGIONAL BOARD IMPACT

None.

STAFF RECOMMENDATION

The State Water Board should adopt the proposed Resolution.